

# ***EXHIBIT 21***

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9 Attorneys for WAYMO LLC

10 UNITED STATES DISTRICT COURT

11 NORTHERN DISTRICT OF CALIFORNIA

12 SAN FRANCISCO DIVISION

13 WAYMO LLC,

14 Plaintiff,

15 vs.

16 UBER TECHNOLOGIES, INC.;  
17 OTTOMOTTO LLC; OTTO TRUCKING  
LLC,

18 Defendants.

CASE NO. 3:17-cv-00939

**PLAINTIFF WAYMO LLC'S LIST OF  
ISSUES ON WHICH IT WILL PRESENT  
EXPERT TESTIMONY DURING ITS  
CASE-IN-CHIEF AT TRIAL (DKT. 563)**

1 In accordance with the Court's Case Management Order (Dkt. 563), Plaintiff Waymo LLC  
 2 ("Waymo") hereby submits this list of issues on which it will offer any expert testimony in its  
 3 case-in-chief. This List is made based on information currently available to Waymo, and Waymo  
 4 requests the right to amend this List or supplement with further witnesses or subject-matter as  
 5 necessary based on further discovery. Waymo also reserves the right to provide additional expert  
 6 to rebut expert evidence disclosed by Defendants.

7 **Pierre-Yves Droz**: Mr. Droz is a Principal Hardware Engineer who has served as the  
 8 technical lead on Waymo's LiDAR project since its inception. Although Mr. Droz's testimony is  
 9 expected to depend, in part, on his technical and specialized knowledge as an engineer in the  
 10 LiDAR and self-driving vehicle field, Waymo does not expect Mr. Droz to offer opinion  
 11 testimony at this time within the scope of the Court's case management order.<sup>1</sup> In an abundance  
 12 of caution, however, Waymo discloses that Mr. Droz is expected to also testify consistent with his  
 13 March 9, 2017 Declaration in Support of Waymo's Motion for Preliminary Injunction (Dkt. 24-3),  
 14 though his testimony may include additional facts, explanation, or context as necessary.

15 **Gary Brown**: Mr. Brown is a Security Engineer in Forensics with Google, Inc. Mr.  
 16 Brown is expected to offer testimony regarding a forensic investigation he conducted relating to  
 17 the activities of Mr. Levandowski and other former Google employees who departed to work for  
 18 Uber. Mr. Brown is expected to testify as to his analysis of Google's networks and hardware  
 19 devices, including Mr. Levandowski's Google-issued laptop computers. In particular, Mr. Brown  
 20 is expected to testify to his analysis of various sets of log data and machine analyses concerning  
 21 Mr. Levandowski's download of more than 14,000 files and trade-secret Google Drive documents,  
 22 subsequent reformatting and erasure of the computer used to perform those downloads, subsequent  
 23 insertion and removal of a USB card-reader, and related activities. Mr. Brown is expected to  
 24 testify consistent with his March 9, 2017 Declaration in Support of Waymo's Motion for  
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 28 <sup>1</sup> In an abundance of caution Waymo also hereby incorporates into this disclosure the list of  
 fact witnesses identified in its June 29, 2017 List of Opinions. (Dkt. 770.)

1 Preliminary Injunction (Dkt. 24-2). Mr. Brown's testimony will include the conclusions drawn  
2 from the results of his forensic investigation, as disclosed in his March 9, 2017 Declaration.

3 Waymo further expects that Mr. Brown will provide testimony regarding Waymo's  
4 reasonable efforts to maintain the secrecy of its electronic systems, digital document storage  
5 repositories , and computer networks

6 **Kristinn Gudjonsson**: Mr. Gudjonsson is a Security Engineer in Forensics with Google,  
7 Inc., and Mr. Brown's manager. Mr. Gudjonsson is expected to testify to the initiation of the  
8 investigation into Mr. Levandowski as well as the forensic investigation performed by Mr.  
9 Gudjonsson and Mr. Brown into Mr. Levandowski's activities. In particular, Mr. Gudjonsson is  
10 expected to testify to his forensic examination of two work laptops assigned to Mr. Levandowski  
11 and used for the downloads at issue in this case, as well as his continuing investigation into Mr.  
12 Levandowski's activities and Mr. Gudjonsson's involvement in the specific investigative steps  
13 performed by his direct report Gary Brown. Mr. Gudjonsson is expected to testify consistent with  
14 Mr. Brown's March 9, 2017 Declaration in Support of Waymo's Motion for Preliminary  
15 Injunction (Dkt. 24-2). Mr. Gudjonsson's testimony will include the conclusions drawn from the  
16 results of his and Mr. Brown's forensic investigation, as disclosed in Mr. Brown's March 9, 2017  
17 Declaration.

18 Waymo further expects that Mr. Gudjonsson will provide testimony regarding Waymo's  
19 reasonable efforts to maintain the secrecy of its electronic systems, digital document storage  
20 repositories , and computer networks

21 **Retained Plaintiff's Technical Expert No. 1**: Waymo expects to provide technical expert  
22 witness testimony pertaining to optics as it relates to a LiDAR system for a self-driving vehicle.  
23 This expert witness is expected to offer testimony regarding general optics, LiDAR principles,  
24 design considerations for a LiDAR system, including PCB design and component layout, as well  
25 as the background state of the art. Retained Technical Expert No. 1 is expected to further explain  
26 Waymo's asserted trade secrets relating to LiDAR optical systems, components, and design of the  
27 same, and is expected to provide opinions regarding the level of skill and effort required to derive  
28 such trade secrets based on the available evidence in this case. Retained Technical Expert No. 1 is

1 expected to also opine that Waymo's LiDAR systems embody certain of Waymo's disclosed trade  
2 secrets.

3 Retained Technical Expert No. 1 is expected to further offer opinions that (i) Waymo  
4 undertook reasonable efforts to maintain the secrecy of its hardware designs reflecting its asserted  
5 trade secrets; (ii) such trade secrets are not generally known by individuals within the relevant  
6 field and/or are not readily ascertainable; and (iii) such trade secrets derive independent economic  
7 value by virtue of their not being generally known in the relevant field. Additionally, Retained  
8 Expert No. 1 is expected to opine regarding Defendants' misappropriation of certain of Waymo's  
9 disclosed trade secrets based on (i) contemporaneous technical evidence reflecting Defendants'  
10 acquisition, use, and/or disclosure of Waymo's disclosed trade secret concepts; (ii) the similarity  
11 of Defendants' technology to Waymo's disclosed trade secrets and/or Waymo's implementation of  
12 such trade secrets in Waymo's commercial products; and/or (iii) the lack of evidence supporting  
13 Defendants' independent development of their own technology.

14 Retained Technical Expert No. 1 is also expected to opine regarding the benefits and value  
15 of Waymo's disclosed trade secrets, the technical and operational value that Waymo's trade  
16 secrets add to Waymo's and Defendants' commercial products, the amount of time and effort  
17 saved by Defendants as a result of their trade secret misappropriation, and technical considerations  
18 informing a hypothetical royalty negotiation between Waymo and Defendants.

19 **Retained Plaintiff's Technical Expert No. 2:** Waymo expects to provide technical expert  
20 witness testimony pertaining to electrical components and circuitry for LiDAR systems and/or  
21 other self-driving vehicle applications. This expert witness is expected to offer testimony  
22 regarding general electrical engineering and circuitry principles as they relate to LiDAR and other  
23 self-driving vehicle applications, as well as the background state of the art. Retained Technical  
24 Expert No. 2 is expected to further explain Waymo's disclosed trade secrets relating to the  
25 electrical systems and circuitry of LiDAR and self-driving vehicle systems and is expected to  
26 provide opinions regarding the level of skill and effort required to derive such trade secrets based  
27 on the available evidence in this case. Retained Technical Expert No. 2 is expected to also opine  
28 that Waymo's LiDAR systems embody certain of Waymo's disclosed trade secrets.

1 Retained Technical Expert No. 2 is expected to further offer opinions that (i) such trade  
2 secrets are not generally known by individuals within the relevant field and/or are not readily  
3 ascertainable; and (ii) such trade secrets derive independent economic value by virtue of their not  
4 being generally known in the relevant field. Additionally, Retained Technical Expert No. 2 is  
5 expected to opine regarding Defendants' misappropriation of certain of Waymo's disclosed trade  
6 secrets based on (i) contemporaneous technical evidence reflecting Defendants' acquisition, use,  
7 and/or disclosure of Waymo's disclosed trade secret concepts; (ii) the similarity of Defendants'  
8 technology to Waymo's disclosed trade secrets and/or Waymo's implementation of such trade  
9 secrets in Waymo's commercial products; and/or (iii) the lack of evidence supporting Defendants'  
10 independent development of their own technology.

11 Retained Technical Expert No. 2 is expected to also offer opinions regarding the invention  
12 disclosed and claimed in U.S. Patent 9,368,936. Such opinions will include (i) the plain meaning  
13 of unconstrued claim terms as they would be understood by a person of ordinary skill in the art in  
14 light of the patent's specification and rebuttal to any arguments by Defendants regarding contrary  
15 interpretations; (ii) the background technology, relevant state of the art, and the level of ordinary  
16 skill in the art as of the patent's filing/priority dates; (iii) the embodiment of the claimed  
17 inventions by Waymo's commercial products; (iv) the infringement of Defendants' commercial  
18 products; (v) the meaning of relevant prior art as it would be understood by a person of ordinary  
19 skill in the art; and (vi) the validity of the patent's claims, including over any asserted prior art.

20 Finally, Retained Technical Expert No. 2 is expected to opine regarding the benefits and  
21 value of Waymo's disclosed trade secrets and patent claims, the technical and operational value  
22 that Waymo's trade secrets and patented inventions add to Waymo's and Defendants' commercial  
23 products, the amount of time and effort saved by Defendants as a result of their trade secret  
24 misappropriation and patent infringement, and technical considerations informing a hypothetical  
25 royalty negotiation between Waymo and Defendants.

26 **Retained Plaintiff's Digital/Electronic Forensics Expert:** Waymo expects to provide  
27 retained expert witness testimony regarding computer networks and electronic systems as well as  
28 forensic evidence (including but not limited to metadata) that can be derived from electronic

1 devices and files that are produced and/or made available for inspection in this case. Waymo  
2 further expects that its Retained Electronic Forensics Expert will provide opinions regarding  
3 Waymo's reasonable efforts to maintain the secrecy of its electronic systems, digital document  
4 storage repositories , and computer networks. Waymo expects that its Retained Electronic  
5 Forensics Expert will also provide opinions regarding the facts surrounding Anthony  
6 Levandowski's downloading of Google confidential files in December 2015-January 2016.

7 Waymo's forensic expert will further provide analysis of the metadata and files provided  
8 by Uber in discovery and/or any inspections conducted by said forensic expert of Mr.  
9 Levandowski or other Uber computers made available.

10 **Retained Plaintiff's M&A Expert:** Waymo expects to provide retained expert witness  
11 testimony regarding standard procedures in the field for mergers and acquisitions of start up  
12 companies and otherwise and the similarities and differences between those standard practices and  
13 the merger and acquisition of Defendant Ottomotto, LLC by Defendant Uber Technologies, Inc.  
14 Retained M&A Expert is expected to also opine regarding how certain aspects of the acquisition  
15 and implementing documents are atypical, including provisions relating to Uber's agreement to  
16 indemnify Ottomotto executives for their prior "Bad Acts." Retained M&A Expert is also  
17 expected to testify on similar subjects as they relate to Uber's right to acquire Otto Trucking, LLC.  
18 Retained M&A Expert is also expected to testify on valuation issues related to the acquisition of  
19 Ottomotto, LLC and the right to acquire Otto Trucking, LLC. Finally, Retained M&A Expert may  
20 further testify regarding the corporate ownership structure of Defendants and affiliated corporate  
21 entities, including, for example, Uber, Otto, Otto Trucking, Tyto Lidar (and their affiliates).

22 **Retained Plaintiff's Damages Expert:** Waymo expects to provide retained expert witness  
23 testimony regarding an appropriate remedy in this case. Retained Damages Expert is expected to  
24 offer opinions regarding the potential total market value for LiDAR systems and other technology  
25 for self-driving vehicles, expected or projected share of the major market participants, the role of  
26 innovation in obtaining and retaining market share and/or market value, and the market impact  
27 resulting from Defendants' trade secret misappropriation and patent infringement in this case.  
28 Based on these analyses, Retained Damages Expert is expected to offer opinion testimony relating

1 to (i) actual damages suffered by Waymo as a result of Defendants' trade secret misappropriation  
2 and patent infringement; (ii) a hypothetical royalty negotiation between Waymo and Defendants  
3 with respect to the relevant technology; (iii) Waymo's anticipated lost profits or market share; (iv)  
4 the amount by which Defendants have been unjustly enriched as a result of their liability in this  
5 case; (v) the difficulties in quantifying damages in this market and the irreparable harm suffered  
6 by Waymo as a result of Defendants' trade secret misappropriation and patent infringement; and  
7 (vi) the amount of pre-judgment interest to which Waymo is entitled.

8  
9 DATED: August 3, 2017

QUINN EMANUEL URQUHART & SULLIVAN,  
LLP

10  
11 By /s/ Charles K. Verhoeven

Charles K. Verhoeven

12 Attorneys for WAYMO LLC  
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